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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,897	10/02/2003	Ashwin Madhwaraj	81862P280	2369
8791 7590 11/09/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER BARON, HENRY	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 11/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/678,897

Applicant(s)

MADHWARAJ ET AL.

Examiner

Henry Baron

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 8/16/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 9-23 and 32-46 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 24-31 is/are rejected.
- 7) ☒ Claim(s) 8 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/16/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Response to Remarks/Arguments*

1. Applicant's arguments filed 8/16/2007 have been fully considered but they are not fully persuasive.
2. The Examiner acknowledges Applicants correcting informality in the specification, the drawing replacement sheets and correction in the claim. The Examiner withdraws objection to drawings and to claim 42.
3. Claims 1 – 46 are currently pending in the application with claim 42 amended.
4. In consideration of arguments presented by the Applicant and upon further search, the Examiner rejects claims 1 – 7 and 24 – 30, objects to claims 8 and 31, and finds claims 9 – 17, 18 – 23, 32 – 40, 41 – 46 in condition for allowance.
5. Upon further consideration, the Examiner finds that Shabtay teaches the limitations of claim 1 and 24, and Shabtay in combination with Applicant's admitted prior art teaches the limitations of claims 2-7 and 25-31 as disclosed below.

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 and 24, are rejected under 35 U.S.C. 102(e) as being unpatentable over Shabtay et al (U.S. Patent 6895441) hereafter Shabtay.

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8. Regarding Claims 1 and 24, Shabtay's teaches a method and a machine readable medium having stored sequence of instruction and is directed to a path reroute mechanism for use in communication networks following a link failure where multiple searches for alternate routing path to restore traffic are made. Each node advertises a Type, Length, Value object (TLV) s that includes bandwidth allocation information. (Abstract). Further, Shabtay teaches that many routing protocols, including ATM PNNI, have the capability of advertising available bandwidth of each link. (4:35-42). Thus, with regards to Claim 1, Shabtay teaches a method, comprising of issuing PTSE information from a node where the PTSE information describes a link within an ATM PNNI network, and the PTSE (e.g. type length values or TLVs) is comprised of a per priority level breakdown of bandwidth reserved on said link (13:35-45 and Figures 6 and 7); a per service category breakdown (11: [0060-0065] read three types i.e. service category of available bandwidth) and where over-subscription factors in allocating bandwidth (11:50-56 read overbooking) factors can be determined. (11: [0055] read available bandwidth factor and overbooking factors used are advertised.).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al (U.S. Patent 6895441) hereafter Shabtay, in view of admitted prior art of Applicant.

11. With regards to claim 2 and 25, Shabtay teaches the limitations of claim 1, but is silent in regards to teaching the PTSE information is a Horizontal Link PTSE information type.

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12. Applicant teaches, as admitted prior art that the PTSE information is a Horizontal Link PTSE information type (36: [0089] read the Horizontal Link PTSE type is commonly used to transport information that pertains to a link.).

13. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the teachings of Shabtay with the admitted prior art teaching of the Applicant.

14. This would be advantageous since finer granularities that the whole of a link's resources may be specified or described with a Horizontal Link PTSE.

15. With regards to claims 3 and 26, Shabtay teaches the limitations of claim 1, but does not disclose PTSE information further comprises SIG information containing the elements in claim 1.

16. Applicant teaches as admitted prior art disclose PTSE information further comprises SIG information containing the elements in claim 1 (37: [0087] read SIG field is typically used by the nodes of a common manufacturer to support functional improvement).

17. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the teachings of Shabtay with the admitted prior art teaching of the Applicant to use SIG fields to convey per priority level and service breakdown of bandwidth reserved on the link as this is a readily available industry standard .

18. With reference to claims 4, 5, 6, 27, 28, and 29, Shabtay teaches CBR, VBR, and ABR service categories. (10: [0025] read ATM and PNNI networks where CBR, VBR, and ABR are service categories in these networks.).

19. Claims 7 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al (U.S. Patent 6895441) hereafter Shabtay, in view of Rom et al, U.S. Patent Application 2003/0236854), hereafter Rom.

20. With regards to claim 7, Shabtay teaches the limitations of claim 1, but is silent with regards an LCN exhaustion state.

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21. Rom teaches of a LCN exhaustion state methodology (Figure 5 and 9: [0115-0119] read in block 38 after maximum bandwidth has been assigned per a priority agenda to designate priority zero for the rest of the requests).

22. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the PTSE teachings of Shabtay with LCN exhaustion teachings of Rom.

23. Advantageously, with this methodology a network node can update its state tables a make a better routing decision with this information.

*Allowable Subject Matter*

24. Claims 8 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

25. Rom teaches of a method for dynamic allocation of a resource base on a priority agenda and a LCN exhaustion state, Rom's LCN exhaustion state is based on a priority agenda and not on a per service category breakdown of actual available capacity. Neither Rom, nor any of the prior art teaches this limitation.

26. Claims 9-17, 18-23, 32-40, 41-46 are allowed over prior art.

27. The following is a statement of reasons for the indication of allowable subject matter: Claims 9, 18, 32, and 41 teaches that if a link is not within an LCN exhaustion state and new connection requests more bandwidth than is advertised as being available upon link for new connection's service category, regarding the bandwidth available for the connection as a sum comprising the addition of: 1) advertised available bandwidth and 2) the total bandwidth reserved on link for connections having lower priority than new connection enhanced by over-subscription for service category. Though Rom teaches of a method for dynamic allocation of a resource base on a priority agenda, neither Rom, nor any of the prior

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art teaches of dynamic bandwidth allocation based on a new connection's service category in combination with over-subscription factors.

*Conclusion*


28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Baron whose telephone number is (571) 270-1748. The examiner can normally be reached on 7:30 AM to 5:00 PM E.S.T. Monday to Friday.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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